



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,927	01/20/2006	Willem Jonker	NL 030937	9396

24737 7590 08/21/2008  
PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
----------

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
----------	--------------

2162

MAIL DATE	DELIVERY MODE
-----------	---------------

08/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,927	<b>Applicant(s)</b> JONKER ET AL.	
	<b>Examiner</b> BAOQUOC N. TO	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. Claims 1-14 are presented for examination.

### ***Specification***

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

Art Unit: 2162

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Drawings***

3. Drawing filed on 01/20/2006 is accepted by the examiner.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 8 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 8 and 13 recite a computer program product which is a non-statutory subject matter. Software per se is not a series of steps or acts and thus is not a process. Software per se is not a physical article or object and as such is not a machine or manufacture. Software per se is not a combination of substances and therefore is not a composition of matter.

### ***Claim Objections***

5. Claims 2-7 and 11-13 are objected to because of the following informalities: claims 2-7 and 11-13 recite "a" which do not provide antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Bass et al. (US. Patent No. 6,675,163 B1).

As to claim 1, Bass discloses the method of searching in a collection of documents, the documents having a tree-like structure and each document in the collection of documents complying with at least one document structure definition in a collection of document structure definitions, comprising the steps of:

receiving (1) a certain branch (independent tree) (col. 10, lines 35-36);

determining (3) a subset of the collection of document structure definitions, each document structure definition in the subset allowing the certain branch to exist in a document complying to the document structure definition (direct table DT) (col. 10, lines 48-49);

determining (5) a subset of the collection of documents, the subset of documents comprising all documents of the collection of documents complying to any one of the document structure definitions in the subset (a single leaf match the those bits...) (col. 10, lines 56-58); and

Art Unit: 2162

searching (7) for at least part of the certain branch in each document (a single leaf match the those bits...) (col. 10, lines 56-58).

As to claim 2, a method as claimed in claim 1, wherein a further step comprises attempting 15 (9) to decrypt each encrypted document in the subset of documents (hash key require decryption) (col. 10, line 23).

As to claim 3, Bass discloses a method as claimed in claim 1, wherein the step of determining a subset of the collection of documents comprises calculating (21) a number for at least part of the certain branch by applying a hash function to the at least part of the certain branch and looking up (23) which documents are mapped to the calculated number in a mapping from number to documents, the mapping being associated with a document structure definition of the subset of document structure definitions and the documents in the mapping complying to the document structure definition (hash function) (col. 10, line 22).

As to claim 4, Bass discloses a method as claimed in claim 3, wherein a further step comprises receiving (27) a certain value associated with the certain branch, the mapping further comprises an association between a document in the mapping and a value domain partition, and the step of determining a subset of the collection of documents further comprises checking (29) whether. a value domain partition associated to a document mapped to the calculated number matches a further value domain partition, the further value domain partition comprising the received value (

As to claim 5, Bass discloses a method as claimed 1, wherein the step of determining a subset of the collection of documents comprises looking up (25), in a

Art Unit: 2162

mapping from document structure definition to documents, which documents comply to any one of the subset of document structure definitions (direct table DT) (col. 10, lines 48-49).

As to claim 6, Bass discloses a method as claimed in claim 1, wherein the step of determining a subset of the collection of document structure definitions comprises calculating (11) a further number for at least part of the certain branch by applying a further hash function to the at least part of the certain branch and looking up (13) which document structure definitions are mapped to the calculated number in a mapping from number to document structure definitions (hash function) (col. 10, line 22).

As to claim 7, Bass discloses a method as claimed in claim 1, wherein the step of determining a subset of 15 the collection of document structure definitions comprises attempting (15) to decrypt each encrypted document structure definition in the collection of document structure definitions and attempting (17) to determine for each document structure definition whether the document structure definition allows the certain branch to exist in a document complying to the document structure definition (hash function) (col. 10, line 22).

As to claim 8, Bass disclose a computer program product enabling a programmable device to carry out a method as claimed in claim 1 (computer program product) (col. 16, lines 37-38).

Claim 9 is rejected under the same reason as to claim 1, Bass further discloses an electronic device for searching in a collection of documents comprising circuitry (33) (processor 10) (col. 5, line 30).

As to claim 10, Bass discloses a method of indexing a collection of documents, the documents having a tree-like structure and each document in the collection of documents complying to at least one document structure definition in a collection of document structure definitions, comprising the steps of:

creating (51) an empty index for each document structure definition of the collection of document structure definitions, the index mapping an integer from a range of integers to a document of the collection of documents (index) (col. 10, lines 44-63);

calculating (53) a number for at least a part of a branch in a document of the collection of documents by applying a hash function to the at least part of the branch, the number being limited to the range of integers and the calculation possibly producing a same number for different branches (calculate an index into the direct table (DT)) (col. 10, lines 44-47); and

creating (55) an entry in an index for a document structure definition to which said document complies, the entry comprising a mapping from said calculated number to said document comprising the at least part of the branch (first structure that implements the tree is called the direct table DT) (col. 10, lines 43-63).

As to claim 11, Bass discloses a method as claimed in claim 10, wherein creating an entry in the index comprises associating the document in the mapping to a value domain partition, the value domain partition comprising a value associated with the branch (color values) (col. 10, line 30).

As to claim 12, Bass discloses a method as claimed in claim 10, wherein: a further step comprises creating (57) an empty further index in which each



Art Unit: 2162

integer from a further range of integers can be mapped to a document structure definition (first structure that implements the tree is called the direct table DT) (col. 10, lines 43-63);

a further step comprises calculating (59) a further number for at least part of said branch by applying a further hash function to said branch, the further number being limited to the further range of integers and the calculation possibly producing a same further number for different branches (first structure that implements the tree is called the direct table DT) (col. 10, lines 43-63), and

a further step comprises creating (61) an entry in the further index, the entry in the further index comprising a mapping from the calculated further number to said document 30 structure definition to which said document complies (first structure that implements the tree is called the direct table DT) (col. 10, lines 43-63).

As to claim 13, Bass discloses a computer program product enabling a programmable device to carry out a method as claimed in claim 10 (computer program product) (col. 16, lines 37-38).

Claim 14 is rejected under the same reason as to claim 10, Bass further discloses an electronic device (71) for indexing a collection of document, comprising electronic circuitry (73) (processor 10) (col. 5, line 30).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2162

Abdo et al. (US. Patent No. 6,725,223 B2) discloses searching document with hash function. This is a 102 (a) rejection.

Applicants are advised to review, comments and if possible to amend the claims to avoid the reference to be used in the next Office Action.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) 273-8300 [Official Communication]

/Baoquoc N To/

Primary Examiner, Art Unit 2162

August 16<sup>th</sup>, 2008